

WP 20: Integrated operation and exploitation of solar physics facilities and coordination

Lead Institution: **KIS (Kiepenheuer-Institut für Sonnenphysik, Freiburg, Germany)**

Participants: **IAC, INAF, CNRS, MPQ, UiO, AIP, SU, UPS, QUB, UCL-MSSL, AISAS, AIASCR, HVAR, ROB, IGAM, UWR, ISS-CSIC, NSO, Cfa-SAO**



Forum for ACCESS and Services (FAS)

In four annual FAS meetings in Stockholm, Madrid, Freiburg, and Brussels

- the Transnational Programme for Access and Services was implemented and monitored
- Concepts for data pipelines and archives were developed
- Concepts for metadata were improved and a SOLARNET Standard for FITS header keywords was created:

<http://sdc.uio.no/open/solarnet-20.3/>

- Activities of two work package (WP20 & 50) were coordinated

4th FAS meeting at ROB (Brussels)



WP20.1 Oversight of the TAS Programme.

Time Allocation Committee

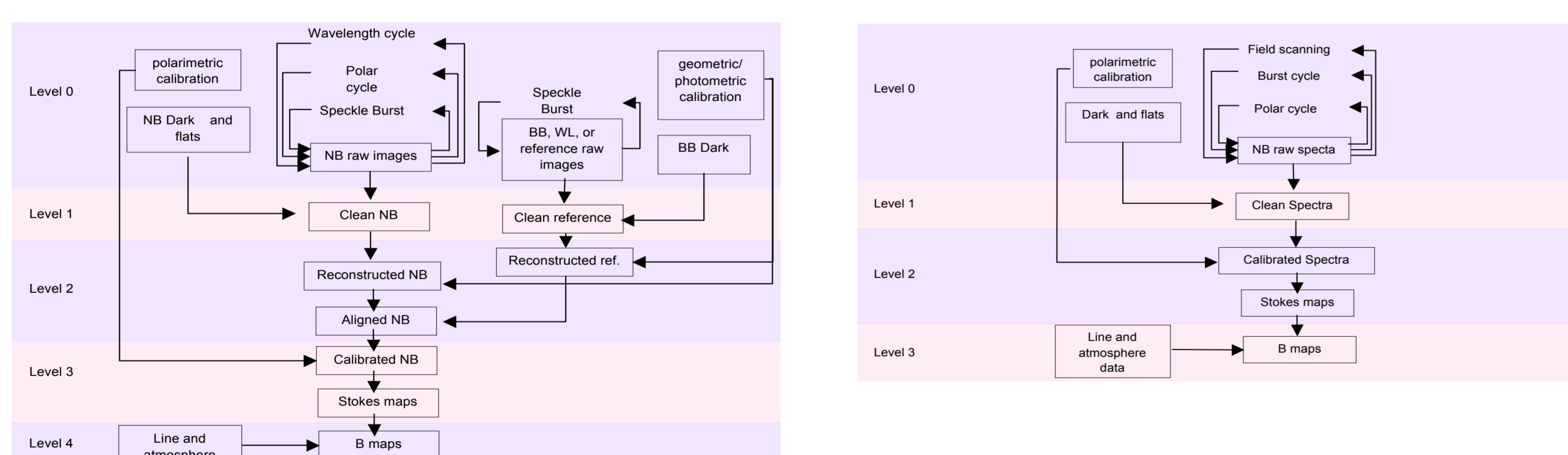
TAS Programme: Transnational programme for Access (WP90) and Services (WP100)

The SOLARNET ACCESS time was allocated by the Time Allocation Committee (TAC) of the European Association for Solar Telescopes (EAST). The EAST TAC allocated a total of 68 observing campaigns with 466 observing days during 4 years of SOLARNET. The ACCESS programme was most successful in being oversubscribed and bringing new users to the telescopes.



WP20.2 Guidelines for pipeline developments

Existing data pipelines were surveyed and examined. Standards for the pipeline flows were defined. Two pipeline flow charts are shown for a spectropolarimetric imager on the left, and a slit-based polarimetric spectrograph on the right:

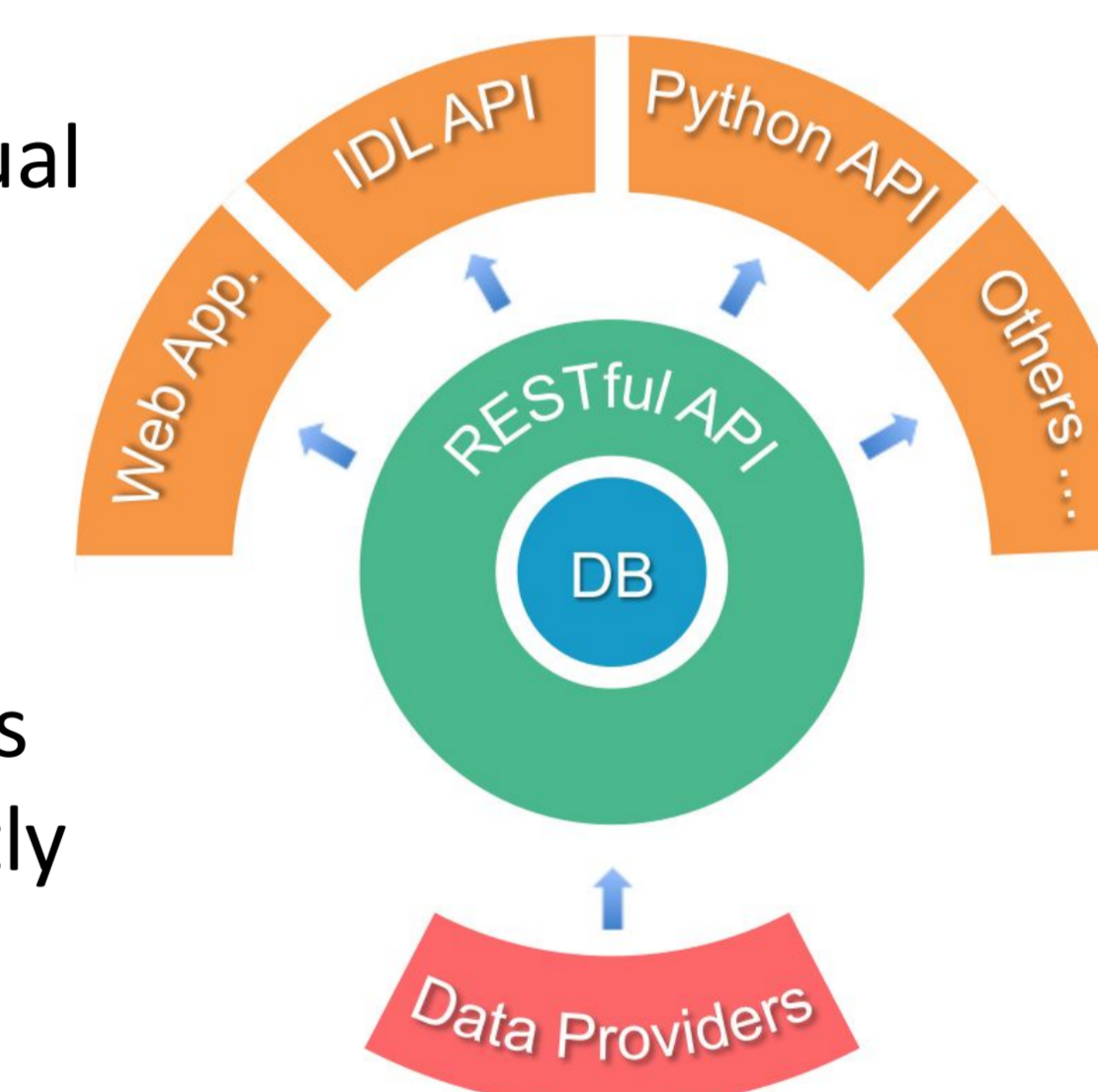


WP20.3 Data Archives and Solar Virtual Observatories

During SOLARNET a prototype for a Solar Virtual Observatory (SVO) was developed:

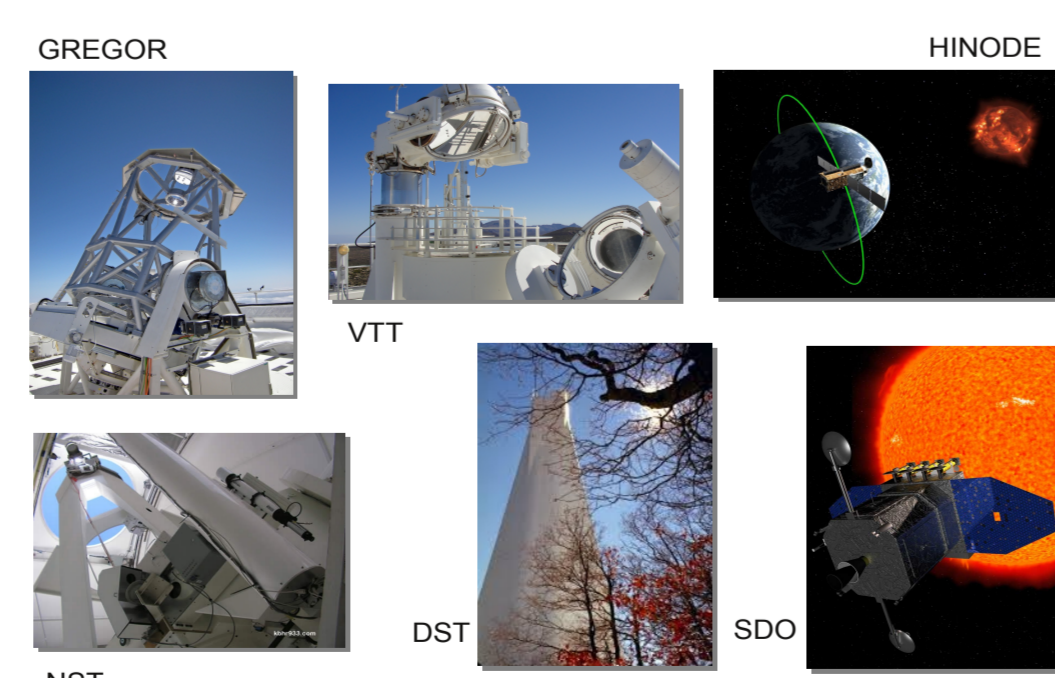
<http://solarnet.oma.be/SVO/#/dataset>

In this first version the metadata requirements were minimized to facilitate its usage. Presently the following data are ingested into the SVO: GRIS, BBI, & GFPI @GREGOR, and IBIS @DST



WP20.4 Coordination with other infrastructures

All high-resolution ground-based and space-based solar telescopes were identified and described. Dedicated coordinated campaigns were organized and performed. One campaign in 2016 coordinated four ground based telescopes in the US and Europe together with two space observatories.



WP20.5 Novel queue observing mode

During SOLARNET we gathered experience in operating solar telescopes in queued service mode performing dedicated campaigns at DST, SST, and GREGOR. Observing campaigns were queued according to scientific merit and executed based on several parameters like, e.g., target availability, seeing conditions, and instrumental configuration.

Valuable insights in practical realization issues were gained which will direct the implementation of the queued service mode at the planned European Solar Telescope (EST).



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